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GPS Meteorology over Northeast Brazil: Perspectives

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Abstract

FUNCEME, the Ceará State Foundation for Meteorology and Water Resources, UECE, the State University of Ceará, INPE, the Brazilian National Institute for Space Research and Mackenzie University are establishing a cooperative program in which the meteorological use of GPS information over Northeast Brazil is one of its components. It is well known that knowing accurately the GPS position, one may calculate the delay in the signal from the satellite to the receiver in order to estimate the integrated water vapor in the atmosphere. In fact, that information is already a by-product, available at the IGS site. In order to incorporate this information into the operational activities at FUNCEME, we proposed to calibrate and validate the GPS-based data by using surface and upper-air observations as well as satellite retrievals.

[Note from the Editors: The overheads of the oral presentation of this contribution can be downloaded from the IVS 2006 General Meeting web site. Please get the PowerPoint file of the presentation at the URL ftp://ivscc.gsfc.nasa.gov/pub/general-meeting/2006/presentations/gm2006_1-09_costa.ppt.]